

In the Claims

1. (Currently Amended) A liquid crystal display panel comprising:
a first substrate including a plurality of pixels and a plurality of sensing parts, each of the sensing parts having a light-sensitive switching device that is directly connected to one of the data lines and generating an output signal containing location information in response to an input signal, the location information indicating a location where the input signal is inputted;
a second substrate connected to the first substrate, the second substrate facing the first substrate; and
a liquid crystal layer interposed between the first substrate and the second substrate.
2. (Original) The liquid crystal display device of claim 1, wherein the input signal corresponds to an incident light, the incident light passing through the second substrate to reach the sensing part, and the sensing part outputting an analog signal in response to the incident light.
3. (Original) The liquid crystal display device of claim 2, wherein the incident light is an infrared light.
4. (Canceled)
5. (Currently Amended) A liquid crystal display device comprising:
a liquid crystal display panel including a plurality of pixels and a plurality of sensing parts, each of the sensing parts having a light-sensitive switching device that is directly connected to one of the data lines and generating an analog signal containing location information in response to an incident light, the location information indicating a location where the light enters; and

a control part receiving the analog signal and transforming the analog signal into a digital signal, the liquid crystal display device being controlled in response to the digital signal.

6. (Currently Amended) The liquid crystal display device of claim 5, wherein each of the pixels includes a gate line that is one of the gate lines, a data line that is one of the data lines, a first switching device electrically connected to the gate line and the data line, and a pixel electrode electrically connected to the first switching device.

7. (Currently Amended) The liquid crystal display device of claim 6, wherein the light-sensitive switching device is each of the sensing part comprises:

a second switching device that is ~~[[being]]~~ turned on in response to the incident light to output a first signal that is received from ~~applied to~~ the data line; each of the sensing parts further comprising:

a third switching device outputting the first signal provided from the second switching device in response to a second signal applied to the gate line; and

a first sensor line receiving the first signal from the third switching device and transmitting the first signal to the control part.

8. (Currently Amended) The liquid crystal display device of claim 7, wherein each of the sensing parts ~~[[part]]~~ further comprises a second sensor ~~[[sense]]~~ line.

9. (Original) The liquid crystal display device of claim 8, wherein the second switching device includes a second gate electrode diverging from the second sensor line, a second source electrode diverging from the data line, and a second drain electrode being electrically connected to the third switching device.

10. (Original) The liquid crystal display device of claim 7, wherein the third switching device includes a third gate electrode diverging from the gate line, a third source electrode being electrically connected to the second switching device, and a third drain electrode being electrically connected to the first sensor line.

11. (Original) The liquid crystal display device of claim 7, wherein the first switching device, the second switching device and the third switching device correspond to an amorphous-silicon thin film transistor.

12-14. (Canceled)

15. (Original) The liquid crystal display device of claim 6, wherein the pixel electrode comprises a transparent electrode and a reflective electrode including a transmission portion and a reflection portion, the reflective electrode facing the transparent electrode.

16. (Original) The liquid crystal display device of claim 15, wherein the reflective electrode comprises an opening window exposing the sensing part, the incident light passing through the opening window and arriving at the sensing part.

17. (Original) The liquid crystal display device of claim 6, wherein the incident light is an infrared light.

18-19. (Canceled)

20. (Currently Amended) The liquid crystal display device of claim 17, wherein a [[the]] sensor line, a [[the]] second source electrode and a [[the]]

second drain electrode of the second switching device comprise a transparent and electrically conductive material.

21. (Original) The liquid crystal display device of claim 20, wherein the pixel electrode comprises a transparent electrode and a reflective electrode including a transmission portion and a reflection portion, the reflective electrode facing the transparent electrode.

22. (Currently Amended) The liquid crystal display device of claim 21, wherein the reflective electrode comprises an opening window exposing the light-sensitive ~~second~~ switching device, the infrared light passing through the opening window and arriving at the light-sensitive ~~second~~ switching device.

23. (Original) The liquid crystal display device of claim 5, wherein the control part comprises:

- a connecting part to receive the analog signal and transform the analog signal into a digital signal in response to a first control signal;

- a first driving part to drive the liquid crystal display panel in response to a second control signal; and

- a second driving part to providing the connecting part with the first control signal and receive the digital signal from the connecting part to output the second control signal.

24. (Original) The liquid crystal display device of claim 23, wherein the first driving part is formed in a chip, the chip being mounted on the liquid crystal display panel, the chip having the connecting part therein.

25. (Original) The liquid crystal display device of claim 23, wherein the first driving part and the connecting part are integrally formed in the liquid crystal display panel.

38. (Currently Amended) A method of manufacturing a liquid crystal display device comprising:

forming a first substrate including a plurality of pixels and a plurality of sensing parts, each of the sensing parts having a light-sensitive switching device that is directly connected to one of the data lines and generating an output signal containing location information in response to an input signal, the location information indicating a location where the input signal is inputted;

forming a second substrate;

combining the first substrate and the second substrate; and

forming a liquid crystal layer between the first substrate and the second substrate.

39. (Currently Amended) The method of claim 38, wherein the first substrate is formed by:

forming a plurality of pixels and a plurality of sensing parts, each of the pixels including a gate line that is one of the gate lines, a data line that is one of the data lines, and a first switching device, each of the sensing parts including a first sensor line, a second sensor line, a second switching device that includes the light-sensitive switching device and a third switching device;

forming a transparent electrode being electrically connected to the first switching device; and

forming a reflective electrode including a transmission portion and a reflection portion, the second switching device being exposed via the transmission portion.

40. (Currently Amended) The method of claim 39, wherein the pixels and the sensing parts are formed by:

forming a first conductive pattern including a gate line, a first gate electrode of the first switching device, a third gate electrode of the third switching

device, a first sensor line and a second gate electrode of the second switching device, the first gate electrode and the third gate electrode diverging from the gate line, the second gate electrode diverging from the first sensor line;

forming a gate insulation layer on the first conductive pattern;

forming a semiconductor layer on a portion of the gate insulation layer, the portion being disposed on near the first gate electrode, the second electrode and the third gate electrode; and

forming a second conductive pattern on the semiconductor layer and the gate insulation layer, the second conductive pattern including the data line, a first source electrode and a first drain electrode of the first switching device, a second source electrode and a second drain electrode of the second switching device, a second sensor line, and a third source electrode and a third drain electrode of the third switching device, the first source electrode and the second source electrode diverging from the data line, the third source electrode diverging from the second sensor line.